

HEAT CONTROL SYSTEM

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ABSTRACT OF THE DISCLOSURE

10 There are provided a water-refrigerant heat
exchanger 30 for exchanging heat between refrigerant
discharged from a compressor 21 and engine-cooling water
circulating an engine-cooling water circuit 10, prior to
being fed into the radiator 22, and a bypass 25 for
guiding the refrigerant prior to being fed into the
evaporator 24 to the water-coolant heat exchanger 30
15 while bypassing the evaporator 24 and the compressor 21.
When it is desired to accelerate the warming-up of the
engine 11, the bypass 25 is closed to operate the
compressor 21 to heat the engine-cooling water by high-
pressure refrigerant, and when it is desired to
20 complement the capacity of the radiator 12, the bypass 25
is open to guide the liquid-phase refrigerant to the
water-refrigerant heat exchanger 30 to effectively cool
the refrigerant by using the phase change of the
refrigerant.